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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/770,023	01/25/2001	Minoru Kouda	ISH1-BB63b	7255

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EXAMINER

NGUYEN, THUKHANH T

ART UNIT PAPER NUMBER

1722

DATE MAILED: 03/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/770,023

Applicant(s)

KOUDA ET AL.

Examiner

Thu Khanh T. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 29-39 and 47-57 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 29-32, 35-39 and 47-56 is/are rejected.
- 7) ☒ Claim(s) 33, 34 and 57 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 29-32, 35-39 and 47-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ribordy et al (5,036,581) in view of Korsch (4,057,381).

Ribordy et al disclose an apparatus for casing dry cell battery, comprising a rotary disk (Fig. 10, 53), a plurality of molding units (20) mounted on the rotary disk at spaced circumferential locations, wherein each of the molding units including an upper die assembly (52) and a lower die assembly (51), wherein the die assemblies include a cylindrical die, or sleeves (60, 68), a lower plunger (70) concentric with the die, an upper plunger (58), and a central pin (72) concentric with the lower plunger (70); a plurality of actuators (62, 64, 74, 76) for controlling the movement of the plungers and the central pin; a feed station (84) for loading powder material (40) into the die.

The apparatus further comprises a plurality of operating units (60) provided respectively to each of the plurality of molding units (58, 68, 70, 72) and moved along a concentric path with the molding units, for transferring and positioning a case (30) above and in alignment with the die (68) of each of the molding unit; and an insertion assembly (Figs. 4-8) including the plungers and the central pin for inserting the pellet material into the case (30), a feeding device (120) for supplying the cases (30) to the molding units, and a knock-out means (100) for removing the

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filled cases to a receiving system (col. 9, lines 31-33). The actuators includes actuating devices connected to cam followers which revolve on cam tracks to control the vertical movement of the plungers and the central pin of molding units (col. 5, lines 54-59).

Ribordy et al, however, fail to disclose a pair of rollers provided at plurality of locations for pressing the plungers.

Korsch disclose a rotary press, comprising a rotary die plate (2), a plurality of pressing units includes upper and lower punches (11, 5), a center pin (12) concentric with the lower punch, a plurality pair of pressure rollers (9, 10 and 25-27), a plurality of loading units (6-8, 13-14), a first rotary cam (28-30) for lifting up the center pin and the lower punch, a second stationary cam (32), a conveyor jigs (Fig. 2), a cylindrical container (23) for supplying the powder material to the dies.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify Ribordy et al by providing a plurality pair of pressure rollers and a plurality of loading units for moving the plungers into the die as taught by Korsch, because the pressure rollers would be able to apply a bigger pressing force on the plungers than other means; thus, the pressing rollers would improve the compression of the powder material in the die cavity.

***Allowable Subject Matter***

3. Claims 33-34 and 57 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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4. The following is a statement of reasons for the indication of allowable subject matter: the prior fails to teach or suggest each of the operating units comprises an operating lever (Fig. 8, 135) connected to the cam followers, a support arm (127) connected to the operating lever and rotatably supported on the rotary disk, a case holding means (126) mounted on the supporting arm, and a convey jig detachably supported on the case holding means for supporting the case.

### ***Response to Arguments***

5. Applicant's arguments filed December 4<sup>th</sup>, 2003 have been fully considered but they are not persuasive.

6. The applicants have argued that *Ribordy et al* fail to disclose that a cylindrical die with powder material molded by an upper plunger and lower plunger that are driven by pressure rollers to create a pellet. *Ribordy et al*, however, disclose that the powder material is filled and pressed within the die 68 and the sleeve 60 (Figs. 5-6) by means 62, 64, 74, and 76. The pressure rollers for pressing the plungers are taught by *Korsch*. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The *Korsch* reference discloses, in combination, the pressure rollers and the loading units for moving the multiple-parts plungers into the die cavity. Because the uses of the actuators in *Ribordy et al* and the pressure rollers and the loading units in *Korsch* are the same, they are interchangeable.

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7. The Applicants allege that the sleeve 68 is only a filling chamber and is not equivalent to the die 3. After the filling of the material within the chamber of the sleeve as shown in Figure 4, the lower punches 70, 72 pressed the material against the wall of the sleeves 68, 60 as in Figure 5. Therefore, the sleeves are equivalent to the die.

In regard to the argument that there is no teaching of operating units for transferring and retractably positioning a case above, outside of and in alignment with the die of each molding unit. The examiner respectfully disagrees. Ribordy et al disclose a plurality of sleeves (60) and the anvil rod (58) for holding the transferring the cases along a concentric path with the molding units (51, 52). In this case the operating units are part of the molding units.

In regard to the insertion assembly, a feed assembly 120 located outside of and in alignment with the die (Fig. 10) to feed the cases above and aligned with the die cavity (Fig. 2, 42). In which the cases could be used to contain pellets or the powder material, and the cases could also be fed to the die before or after the compressing of the material. Those are the intended use of the apparatus that do not result in different structure of the feeding mechanism.

The Applicants repeatedly argues that in *Ribordy et al* because the casings have previously provided before the compression of the material, it is unnecessary to have an inserting means to insert the molded pellets into a case. However, the structure of the claimed inserting assembly and the feed assembly 120 are the essentially the same, in which the feed assembly 120 and the lower punches 70, 72 insert the loose material into the case before compressing the powder into a tablet; while the current inserting assembly inserts the material into the cases after it has been compressed. The orders of the steps are different, but the structures of the apparatus are still the same. Claims directed to apparatus must be distinguished from the prior art in terms

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of structure rather than function. In re Danly, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). "[A]pparatus claims cover what a device *is*, not what a device *does*." Hewlett- Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). (Emphasis in original).

Further, A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987). "Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim." Ex parte Thibault, 164 USPQ 666, 667 (Bd. App. 1969). Furthermore, "[i]nclusion of material or article worked upon by a structure being claimed does not impart patentability to the claims." In re Young, 75 F.2d 966, 25 USPQ 69 (CCPA 1935) (as restated in In re Otto, 312 F.2d 937, 136 USPQ 458, 459 (CCPA 1963)).

Regarding to the upper punch 58, the applicants assert that the element 58 is only an anvil rod, which simply holds the casing in place and does not act as a plunger. A closer look at the Ribordy et al reference has indicated that the lower punch (70, 72) press the molding material **against** the surface of the upper plunger 58. Not only that the plunger 58 retains the casings 30 in place, it also absorbs the compacting force from the material and the lower plunger. The casing 30, by itself, would be deformed under the compressing force of the plungers.

Although the upper plunger does not move after the casing has been in placed, it is movable up and down by the actuators (62, 64). It has been well known in the pellets forming art to use pressure rollers to actuate the upper and lower punches as disclosed in Kroch, because

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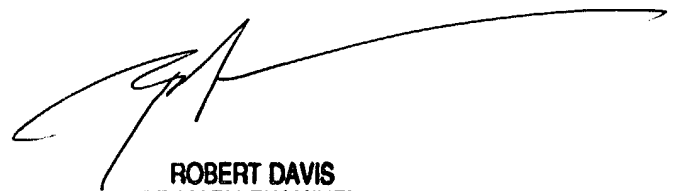
the pressure rollers would be more consistent in applying compressing forces to the plungers than other means.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Khanh T. Nguyen whose telephone number is 571-272-1136. The examiner can normally be reached on Monday- Friday, 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TN



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3/2/04